

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Office Action dated 4 October 2006. Responsive to the rejections made by the Examiner in the Office Action, Claims 1, 3-5, 14 and 18 have been amended.

In the Office Action, the Examiner rejected Claims 4 and 5 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner opined that it was unclear what the term “fixed power consumption,” as recited in claim 4, means. Accordingly, claim 4 has been amended to correct the cited ambiguities.

Additionally, Claims 1–3, 7 and 18 were rejected under 35 U.S.C. § 102(e) as being anticipated by Schmidt (U.S. Patent App. # 2004/0072046). Claims 4-5 were rejected as being unpatentable over Schmidt in view of Fuju (U.S. Patent # 6,080, 500). Additionally, claims 6, 8-13, and 15-16 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Schmidt in view of Andreoli (U.S. Patent # 5,605, 770). Further, Claim 14 was rejected under 35 U.S.C 103 (a) as being unpatentable over Schmidt in view of Andreoli and further in view of Leboe (U.S. Patent # 6,649,290). In setting forth this rejection, the Examiner stated that Schmidt discloses the limitations set forth in Claims 1-3, 7, and 17-18.

Prior to discussing the prior art relied upon by the Examiner, it is believed beneficial to briefly review the apparatus of the invention of the subject Patent

Application, in light of the pending Claims. The Claims now more clearly recite the unique apparatus, which provides many advantages over the prior art. Among the features of Applicant's inventive functional test and demonstration apparatus are: A control device, a fuel cell stack having a hydrogen gas inlet and outlet, air outlet, and a pair of output terminals for supplying a DC output voltage, a load system, a hydrogen gas supply pipeline, an air supply pipeline. The apparatus also includes a connection and display panel having a plurality of joints disposed in coordinated manner with a plurality of display regions. Thus, the panel is capable of being physically connected to various connections of the fuel cell system and simultaneously generate a graphical representation of those connections so that the user may gain an intuitive understanding of the fuel cell stack in actual operation.

It is respectfully submitted that Schmidt discloses a method and apparatus for maintaining fuel cell cathode air quality including: a fuel cell stack, air pump, air controller, and an LCD panel. Note, however, that the LCD panel (which the examiner equated to the connection and display panel of subject Patent Application) is merely a single passive display mounted on a circuit board, which does not have the capability of "providing physical connection," to various devices within the fuel cell apparatus. Thus, Schmidt's LCD clearly departs from an apparatus having both a "plurality of joints for physical connection to certain connections" and "a plurality of display regions arranged in coordinated manner," thereabout, "whereby the joints and display regions collectively define a visual

representation of the fuel cell stack in operation.” At best Schmidt’s LCD panel is limited to merely conveying graphical information. (See paragraph [0045]). Yet, nowhere does Schmidt suggest or disclose the display panel including “a plurality of joints” for being physically coupled to various connections of the fuel cell stack.

Thus, as Schmidt fails to disclose each and every one of the claimed elements, it hardly anticipates the invention. Furthermore, as the reference fails to suggest such a combination of elements and in fact fails to recognize the problems solved by the claimed invention, it is not believed to make obvious the invention either.

The Fuju reference does not overcome the deficiencies of Schmidt. Fuju discloses a moveable fuel cell apparatus. However, Fuju’s apparatus does not disclose a connection and display panel at all. Furthermore, Fuju’s fuel cell apparatus must be completely removed to view its operation. (See col. 2 lines 44-50). Nowhere does Fuju teach an apparatus capable of monitoring the status on a display screen or panel without disturbing its physical location. Fuju’s apparatus clearly teaches away from an apparatus having “ [a] connection and display panel... to define a visual representation of the fuel cell stack in operation.”

Additionally, Andreoli does not overcome the deficiencies of Schmidt. Andreoli, like Fuju, fails to disclose a connection and display panel. In fact,

Andreoli's device merely functions as a pre- heater and cooling mechanism for a fuel cell.

Moreover, the Leboe reference does not overcome the deficiencies of neither, Schmidt nor Andreoli. The Leboe reference was cited as disclosing common pipelines to supply air as both the reactant and coolant. However, as Loebe's system is a hybrid system delivering energy to an external load via an energy storage device, it too teaches away from the apparatus of the subject Patent Application.

Therefore, as none of Schmidt, Fuju, Andreoli, nor Leboe disclose the unique apparatus now more clearly recited in the pending claims for the purposes and objectives disclosed in the subject Patent Application.

Thus, it is believed that independent Claim 1 is now allowable. Further, it is believed that dependent Claims 2-18 are allowable for at least the same reasons as the claims upon which they depend.

In view of the foregoing amendments and remarks, Applicant believes that the subject Patent Application is now in condition for allowance and such action is respectfully requested.

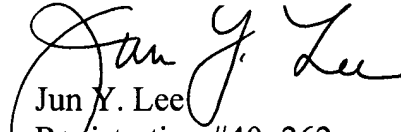
No fee is believed to be due in connection with this Amendment. However, if there are any further charges associated with this filing, the Director of Patents and Trademarks is hereby authorized to charge Deposit Account #18-2011 for such charges.

MR2863-134

Serial Number: 10/720,527

Response to Office Action Dated 14 December 2006

Respectfully submitted,
FOR ROSENBERG, KLEIN & LEE


Jun Y. Lee
Registration #40,262

Dated: 8 March 2007

Suite 101
3458 Ellicott Center Drive
Ellicott City, MD 21043
(410) 465-6678
Customer No. 04586